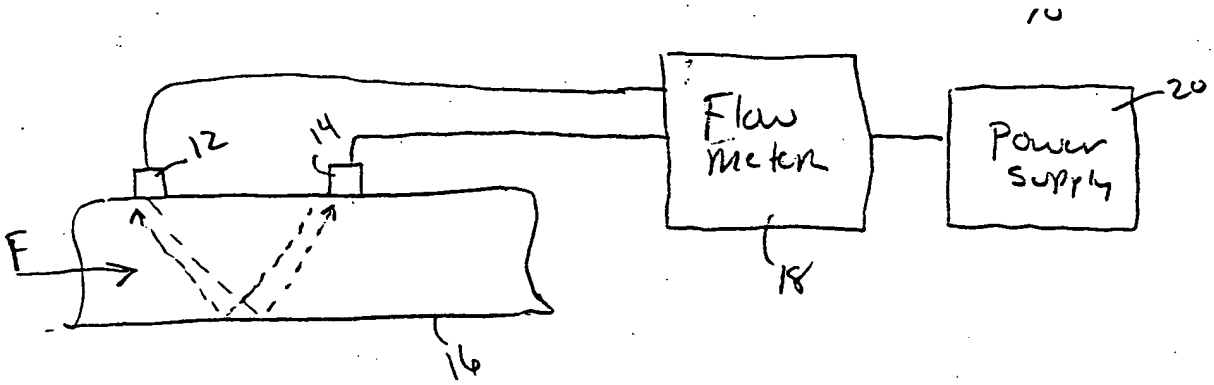

Fig 1
(PRIOR ART)

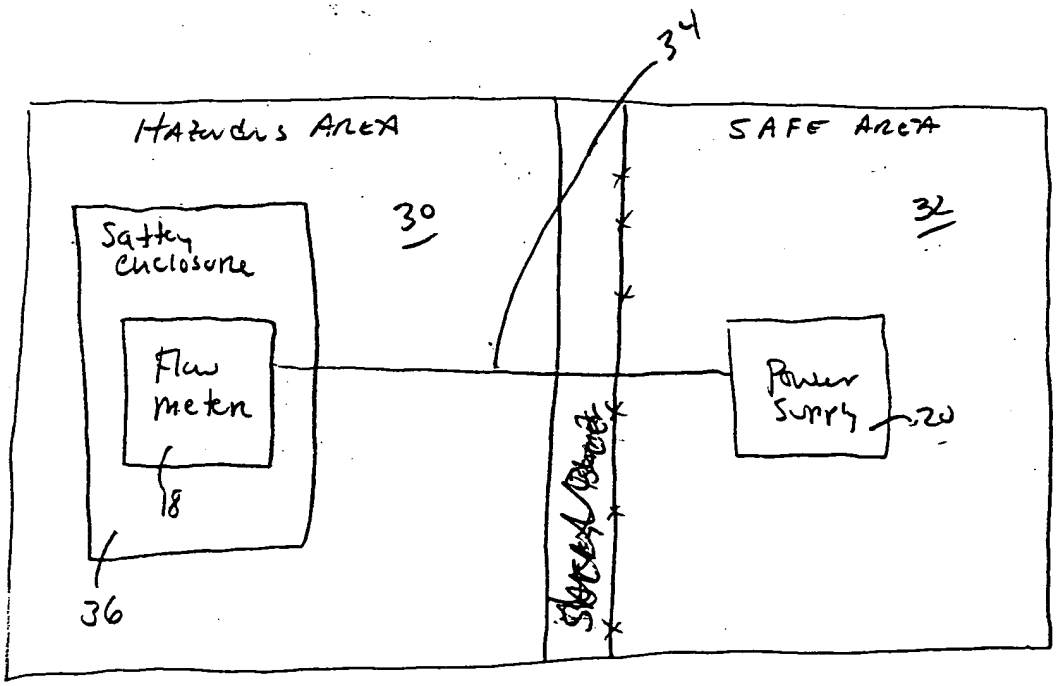

Fig 2
(PRIOR ART)

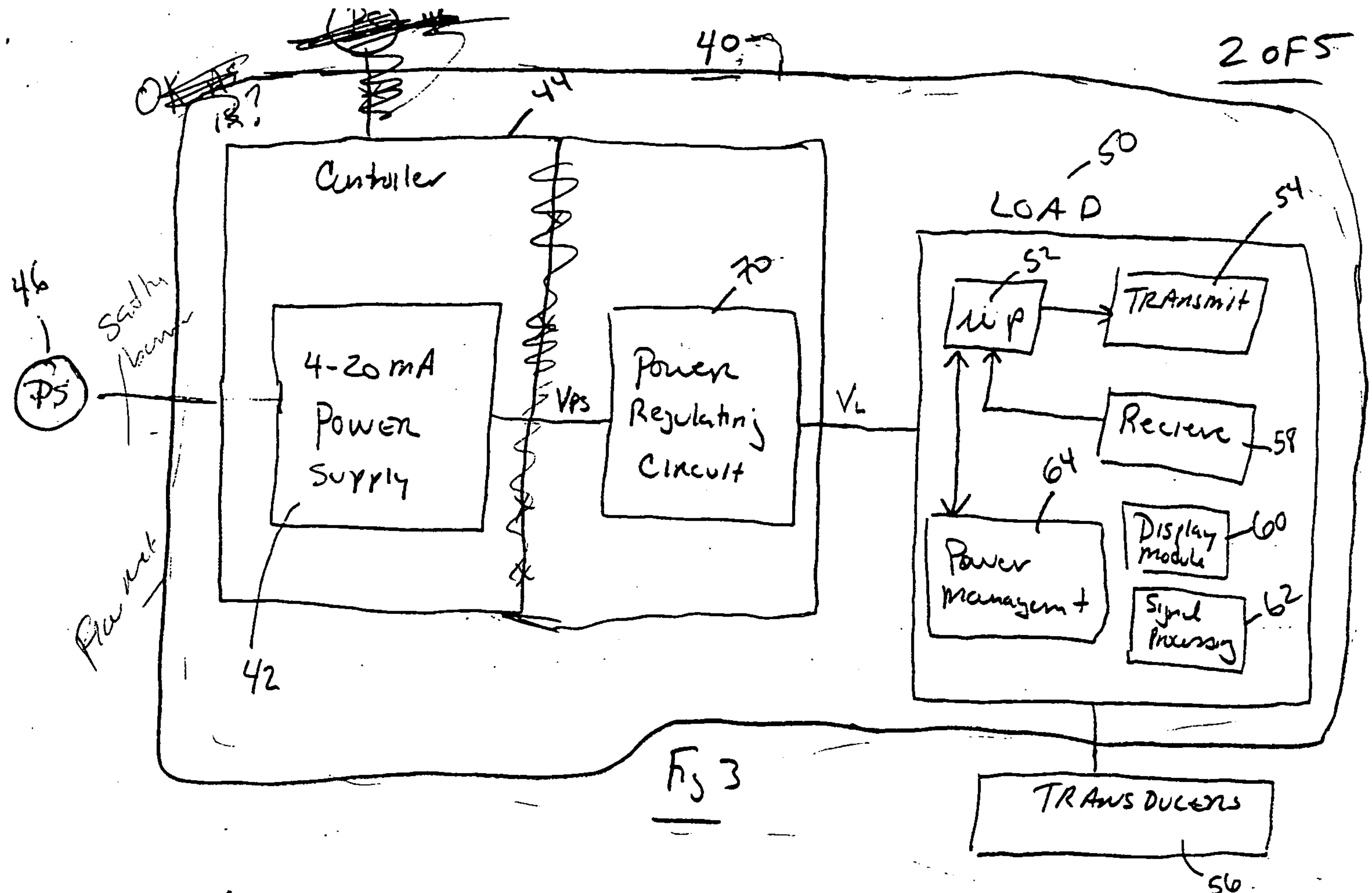
40
44
Controller
4-20 mA Power Supply
Vps
70
Power Regulating Circuit
VL
50
LOAD
52
μP
54
TRAnsmit
Reciever
58
64
Power management
Display module
60
Signal Processing
62
46
PS
42
TRANSDUCERS
56

Fig 3

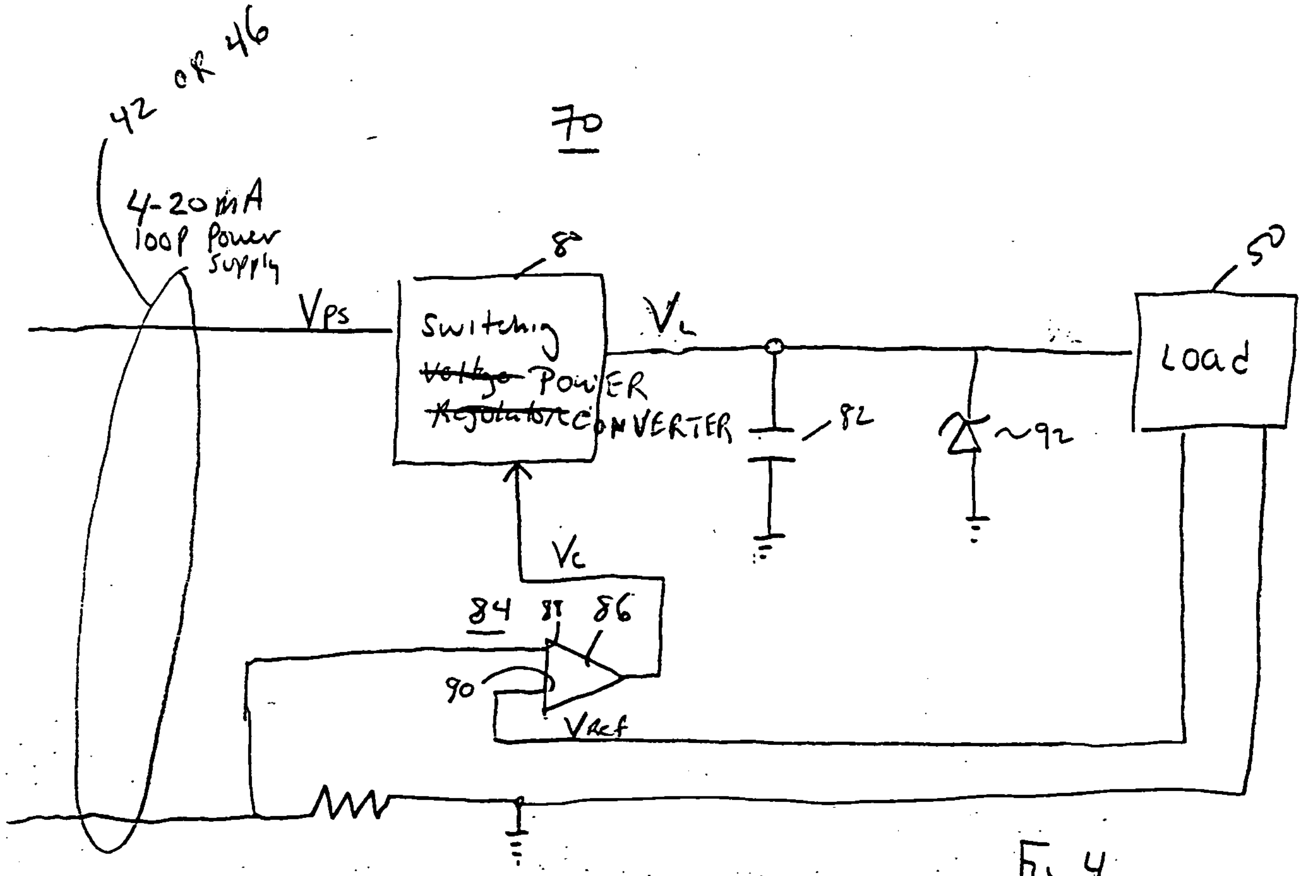
42 OR 46
70
4-20 mA loop Power supply
Vps
80
Switching POWER CONVERTER
VL
82
92
50
Load
Vc
84
88
86
90
Vref

Fig 4

3 OF 5

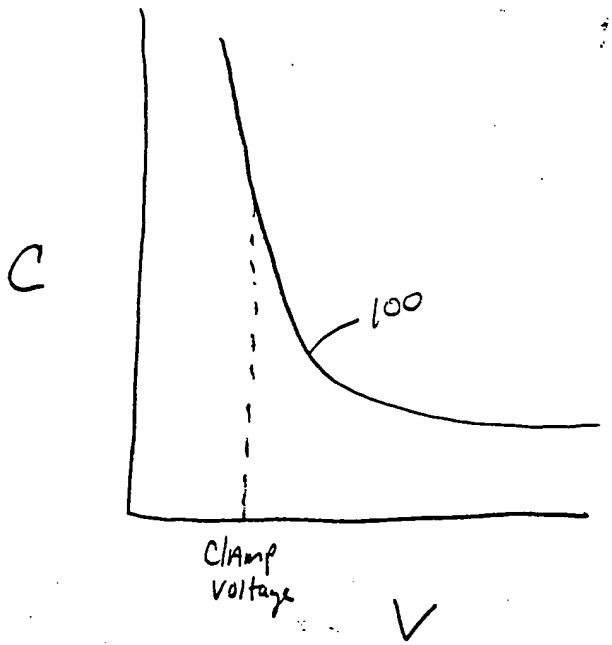

Fig 5

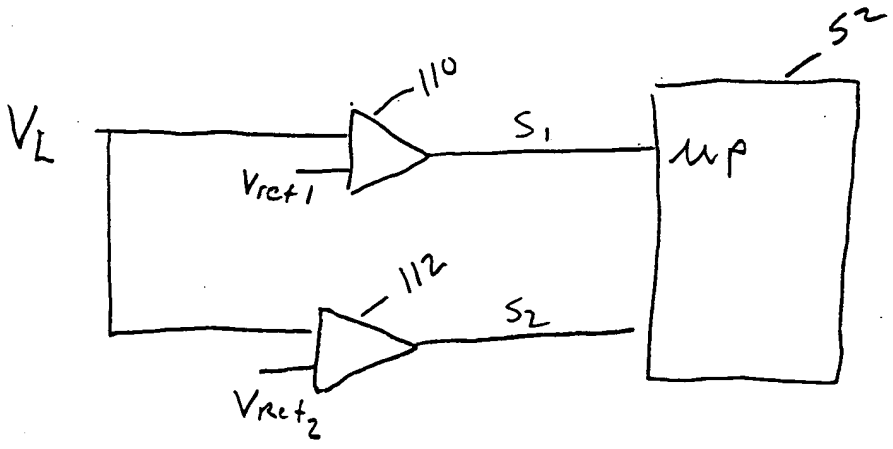

Fig 6

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Power Management Flow Chart

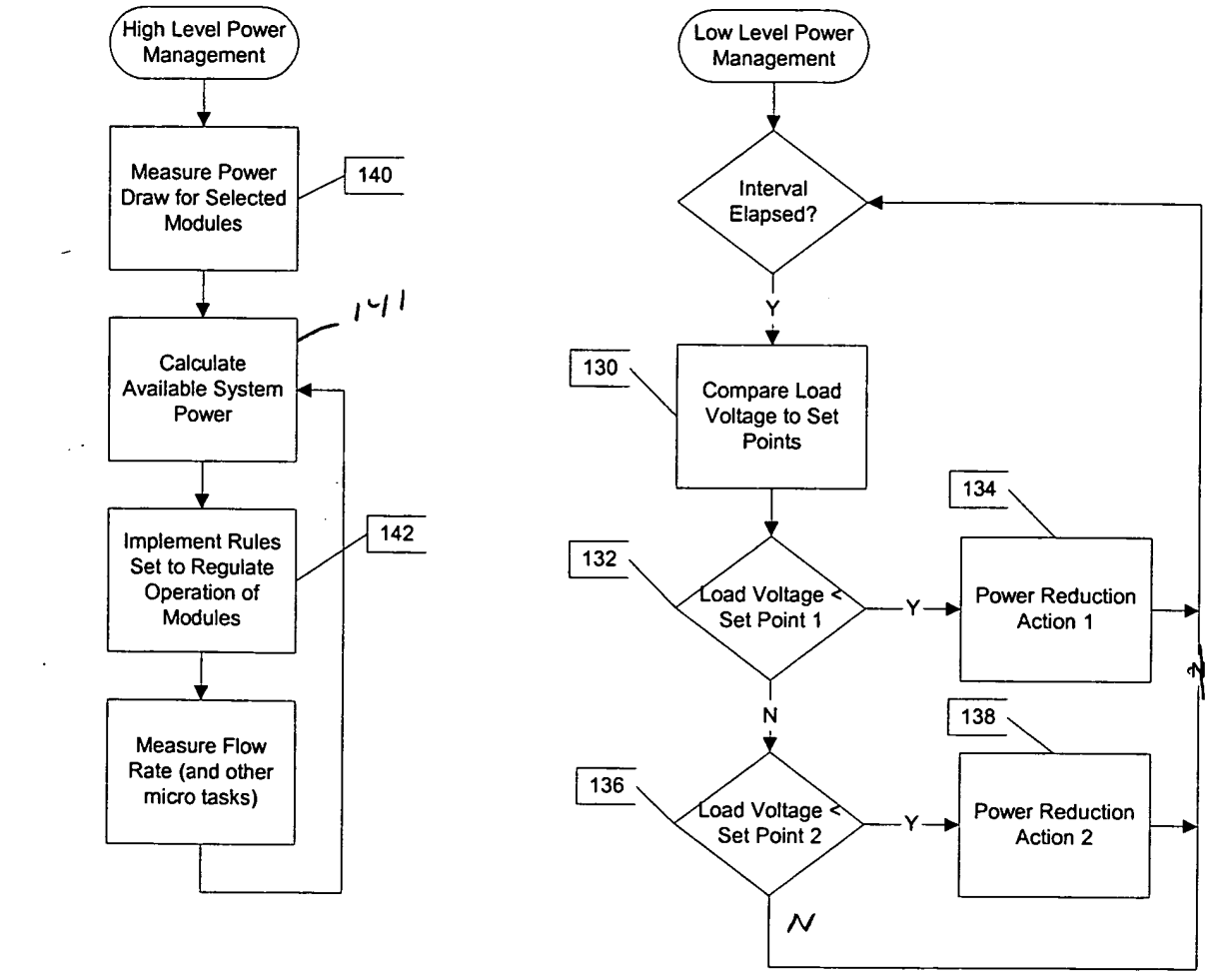

Figure 7

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